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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,905	04/18/2005	Veronique Hall-Goulle	4-22774/A/PCT	3921

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EXAMINER
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KHAN, AMINA S

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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03/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/531,905	<b>Applicant(s)</b> HALL-GOULLE ET AL.	
	<b>Examiner</b> AMINA KHAN	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1/23/09.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 6-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 23, 2009 has been entered.

2. Claim 1,4 and 6-20 are pending. Claims 2,3 and 5 have been cancelled. Claims 1,6 and 10 have been amended.

3. All prior rejections are withdrawn in view of applicant's arguments.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,6-15,17,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lent et al. (US 5,837,042).

Lent et al. teach ink jet printing security markings such as bar codes on objects such as paper substrates (column 14, lines 15-65; column 15, lines 5-15) with compositions comprising 0.1-2% colorants and 80-97% ink carriers (column 6, lines 64-67; column 8, lines 25-35; column 4, lines 40-55) wherein the colorant is a lanthanide chelate such as europium acetylacetonate, which meets the limitation of compound (XXXV) as claimed in claim 10, combined other fluorescent pigments and dyes (column 7, lines 5-40) and wherein the carrier is water and/or alcohols such as methanol, ethanol, propanol and butanol (column 6, lines 50-60).

Lent et al. do not teach all the instantly claimed embodiments in a single example.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the instantly claimed components and method steps from the printing methods of Lent et al. because Lent et al. teaches the advantages of using these highly luminescent compounds in security printing of documents.

6. Claims 1,4,6-15,17,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lent et al. (US 5,837,042) in view of Orient Kagaku Kogyo KK et al. (JP 2002173622).

Lent et al. teach ink jet printing security markings such as bar codes on objects such as paper substrates (column 14, lines 15-65; column 15, lines 5-15) with compositions comprising 0.1-2% colorants and 80-97% ink carriers (column 6, lines 64-67; column 8, lines 25-35; column 4, lines 40-55) wherein the colorant is a lanthanide

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chelate such as europium acetylacetonate, which meets the limitation of compound (XXXV) as claimed in claim 10, combined other fluorescent pigments and dyes (column 7, lines 5-40) and wherein the carrier is water and/or alcohols such as methanol, ethanol, propanol and butanol (column 6, lines 50-60).

Lent et al. do not teach the instantly claimed compounds of formula (VII).

Orient Kagaku Kogyo KK, in the analogous art of security printing, teaches the advantages of using highly luminescent compounds of formula (VII) (see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the printing methods of Lent et al. by incorporating into the printing compositions the lanthanide chelates taught by Orient Kagaku Kogyo KK because Orient Kagaku Kogyo KK teaches the advantages of using these highly luminescent compounds, which are substantially invisible under visible light but show sufficient radiating strength under ultraviolet rays, in security printing of documents such as bar codes and Lent invites the inclusion of lanthanide chelate into the printing compositions for security printing of bar codes. It is prima facie obvious to combine the two references, each taught for the same purpose, to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423 when ingredients are well known and combined for their known properties, the combination is obvious absent unexpected results.

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7. Claims 1,4,6-10 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jalon (US 4,891,505) in view of Orient Kagaku Kogyo KK et al. (JP 2002173622).

Jalon teaches printing or dyeing fibers with energy transfer chelates or extruding fibers comprising energy transfer chelates to provide materials for security documents such as bank notes, checks, credit cards, etc. (column 1, lines 25-35; column 6, lines 1-10; column 3, lines 5-30). Jalon further teaches the fibers may be polyamides (see examples).

Jalon et al. do not teach the instantly claimed compounds of formula (II) and the percentage of these compounds.

Orient Kagaku Kogyo KK, in the analogous art of security printing, teaches the advantages of using highly luminescent compounds of formula (VII) (see abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the extruding methods of Jalon by incorporating into the extruding compositions the lanthanide chelates and solvents taught by Orient Kagaku Kogyo KK et al. because Orient Kagaku Kogyo KK et al. teach the advantages of using these highly luminescent compositions in security printing of documents and Jalon teaches the equivalence of printing, dyeing or extruding fibers with lanthanide chelates. It is prima facie obvious to combine the two references, each taught for the same purpose, to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423 when ingredients are

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well known and combined for their known properties, the combination is obvious absent unexpected results.

Regarding the claimed percentage of these compounds to be present in the extruding composition, optimization of this parameter would only require routine skill in the art for the benefit of maximal security of the documents produced.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMINA KHAN whose telephone number is (571)272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/  
Primary Examiner, Art Unit 1796

/Amina Khan/  
Examiner, Art Unit 1796  
February 28, 2009